ON

UTERINE HÆMORRHAGE,

WITH

PARTICULAR REFERENCE TO A CASE OF PARTIAL PRESENTATION OF THE PLACENTA.

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The following case of child-labour seems to me to be deserving of record, not less on account of its favourable termination under most unpromising circumstances, than from the complication and urgency of the symptoms, with which it was accompanied. If it tend to confirm or elucidate any of those important points of practice, which are at present undetermined and involved in obscurity, and which it is of the greatest consequence should be established by rule, my object in requesting a place for it in the London Medical Gazette will be fully attained. A faithful narrative, and well-selected collection of authenticated cases, afford the best, because they are the only legitimate grounds, upon which the establishment of sound principles and correct practice can be founded. I am well aware of the impropriety of forming precedents, and deducing practical inferences from isolated cases; but the history of all important deviations from the ordinary course of nature, especially in those labours which are attended with immediate danger to the patient, and which involve the practitioner in fearful responsibility, is instructive, as illustrating the utility or inutility of the particular mode of management pursued. On so interesting a subject as that of uterine hæmorrhage, it is always desirable to know the peculiar causes on which success, or the want of it, depends —whether existing difficulties have been averted by timely and judicious interference, or whether they have been increased by negligence, inadvertence, or mismanagement. When it is considered, that general rules, as laid down in systems of midwifery, may be too refined, and admit only of partial, and therefore of imperfect application, as they are all more or less liable to be controlled and modified by adventitious circumstances, which it is impossible to describe, foresee, or guard against, it seems the more necessary, that a fuller and more precise account of every complex case should be published, in order that the method of treatment pursued

(especially when conflicting opinions are entertained on the subject,) may be presented under every possible contingency of symptoms, and data in this way established, by which the comparative merits of opposed practices may be tried. "The true foundation," says Dr. Denham, "upon which the rules of practice should be formed, is the result of a number of individual cases."

At six o'clock, P.M. (Sunday) Nov. 19, 1837, I was requested by my friend, Mr. Gibson, surgeon, West Linton, to visit Mrs. R——, a lady upwards of 30, delicate, and of relaxed constitution, in labour of her third child. The previous labours had been natural, short, and easy. During the whole period of her present pregnancy, she had suffered much from frequent attacks of bilious and acid vomiting, attended with gastrodynia and pyrosis. She was at all times liable to complaints arising from indigestion, particularly in the early months of pregnancy, but the dyspeptic symptoms, in place, as formerly, of abating in violence, as gestation proceeded, continued in a very aggravated form, and had greatly impaired her strength. She was more than usually anxious about her confinement, both on account of the general debility under which she laboured, and because the uterine action had been preceded, and was ushered in by hæmorrhage. The first appearance of the discharge, which she attributed to lifting up* her youngest child, a very stout boy, occurred about three weeks before. Mr. Gibson was called in early on Friday morning (the 17th) in consequence of another return of hæmorrhage without pain, which was at first mistaken for the escape of the liquor amnii. The quantity of blood lost might be, as nearly as Mr. G. could guess, four or five ounces. In the course of the day she lost nearly as much more. On vaginal examination, he found the os uteri very rigid and slightly dilated, and within it the edge of the placenta. He confined her to bed, applied the plug, and administered an opiate. She continued in this state until Sunday evening, when I was summoned. I found her very much exhausted, her features sunk, without paleness of face, and her strength completely worn out with violent paroxysms of sickness and retching. I was informed, that her stomach had been so irritable as instantly to have rejected every article of food she had swallowed for the last two days. She had had little or no sleep during that period, being almost constantly distressed with gnawing pains in the abdominal region, proceeding from spasmodic contractions of the uterus.

At my request Mr. G. removed the plug before I examined. His account was substantially correct. The upper part of the vagina contained a number of small clots. The os uteri was opened scarcely to admit two fingers, and its neck was firm and undilatable. Its condition afforded an excellent instance and proof of that particular cause retarding the progress of the labour, by the resistance it occasions to dilataton, which Dr. Hamilton† has described under the name of an undeveloped band of the cervix uteri. The membranes were entire, and the presenting portion contained a barely perceptible quantity of the liquor amnii. Although the fœtal head had not entered the pelvis, it was felt distinctly enough to indicate

* Dr. Merriman records a case similar in some respects.—Vide Synopsis of Difficult Parturition, Case 2d, page 274.

† Vide Hamilton's Practical Observations, part i. page 216.

a natural presentation. About an inch above the rigid cervix, a detached portion of placenta was discovered on the anterior side of the uterus, extending in a slanting direction upwards to the right. I kept my finger within this circular band for a considerable time, for the purpose of ascertaining the strength of the uterine action, and the nature of the hæmorrhage. The uterine contractions, which were very irregular, I perceived, were confined to the anterior and upper half of the body of the uterus, and scarcely affected the os uteri. As I manually assisted the dilatation of the latter, I found that a number of small firm clots were discharged by this partial action; and what was much more important to know, that there was at the same time an insidious oozing of warm fluid blood.

The pulse was quick and small. Its state, however, could not be relied on to determine that the loss of blood had been either very great or dangerous, as that had been withdrawn gradually and not rapidly from the body; and its weakness admitted of being explained by the presence of other symptoms. These symptoms (the sickness, excessive retching, and faintness without syncope) rendered the impression made on the system by the hæmorrhage more difficult to be ascertained.

In our patient's state of general debility, every source of possible danger was to be inquired into. It was not only necessary to examine the state of the pulse and countenance, but, as Mr. Ingleby has remarked, although it imposes on the practitioner "the office of nurse as well as that of accoucheur," it is of the greatest importance that the condition of the clothes and bedding should also be inspected. It was possible, in the recumbent posture to which the body had been so long confined, that a deceptive hæmorrhage might have occurred, without any marked or apparent indications. Mr. Ingleby* mentions that he was once called to a case in which "the practitioner, who had been in attendance the whole of the night, was aware of a progressive exhaustion, but unconscious of its cause. When I saw the patient, about nine o'clock in the morning, I was told there had been no hæmorrhage; but on moving her from the spot on which she lay, the bedding was found saturated with blood." The same fearful exhibition was presented on raising our patient from the bed to the erect posture; and I discovered what has been generally remarked, that more clots and fluid blood were discharged in that state, and to such an extent that I soon found it necessary, on the ground of safety, that she should be replaced on her side.

It was obvious that a decided line of practice should be immediately adopted—that the time for watching the symptoms had passed away, and the period for acting had arrived.

I endeavoured, unsuccessfully, to allay abdominal uneasiness by friction over the uterine parietes—the sickness at stomach by an ipecacuanha emetic—and the acidity afterwards by the carbonate of soda, diffusible stimulants, and brandy and water. But the stomach was in too irritable a state to retain them long enough for any benefit to be derived. I regretted this the more, as repeated doses of the infusion of the ergot, the effects of which I was most anxious to try, were also rejected, almost so soon as they were swallowed.

Here was a case of labour, where uterine action was irregular and inef-

* Vide Ingleby's Treatise on Uterine Hæmorrhage, 1832, page 144.

ficient, and there was no tendency to its establishment—where there existed, along with constant nausea, a rigid condition of the cervix uteri—where there was partial separation of the placenta with presentation of its edge, accompanied with considerable hæmorrhage, insidiously going on and occurring in a delicate person, worn out by pain and want of food and sleep, and whose constitution could not stand the loss of much blood.

Under such circumstances what was the most proper course to pursue? The liquor amnii was collected in such small quantity, I have mentioned, that it scarcely could be felt through the membranes, which lay in close contact over the head. It occurred to me, that in consequence of the contraction of the cervix uteri upon the head, the descent of the waters from the upper to the lower part of the uterus might be intercepted. I have not unfrequently observed a similar effect to be produced in natural labours, when the head rapidly and easily enters, and fills up the superior aperture of the pelvis. When the upper part of the uterus is either distended by the liquor amnii being detained in the way I have described, or when its general volume is enlarged beyond its usual extent, by superabundance of that fluid, the practical fact is undoubted, not only that the pains at the commencement of such labours are unusually fatiguing, and productive of little effect upon the os uteri, and the female is desponding, but that its discharge establishes and accelerates uterine action. In order to ascertain how far my opinion was correct, I introduced my hand into the vagina, and with my two fore-fingers, which I retained within the os uteri, I raised up the head of the child. The fits of vomiting and paroxysms of pain soon dislodged the liquor amnii from above, and when I found the membranes considerably distended by it, I withdrew my hand. This good effect, however, was counterbalanced by a slight increase of the draining, and considerable protrusion of the placenta. After this, however, she began to feel (as in the commencement of the former labours) pains in the back; but as these had little or no effect upon the cervix uteri, and as both more clots and fluid blood were expelled, the only alternative left, in order to prevent the formation of the former and the further discharge of the latter, was to rupture the membranes. I accordingly did so, and was careful that the liquor amnii should be wholly discharged. I effected this by raising the fœtal head above the brim of the pelvis before the accession of each pain, and keeping it in that position during the paroxysms. This plan was the more necessary, that the waters seemed superabundant in quantity. I was convinced that the dilatation of the cervix and os uteri was to be a very tedious process, and one which could not be safely trusted to the unaided efforts of nature. But I was persuaded, in order to accomplish that object, manual assistance could be as efficaciously afforded after as before the liquor amnii was discharged. By removing that fluid, there were the chances either that the hæmorrhage would be removed or greatly abated by general uterine contraction, or by the pressure of the child's head on the particular portion of the uterine surface, from which the placenta was separated, and which there were many reasons to suppose was in the vicinity of the cervix. In this expectation I was not disappointed. About twenty minutes elapsed before the uterus began to act so as sensibly to affect the cervix. Its efforts in overcoming the resistance to dilatation, were, I perceived, feeble and altogether unavailing without manual assistance. My whole attention and time were

therefore engaged in attaining that object. As "the impotency of labour" proceeded, in a great measure, from the constricted condition of the circular fibres of the cervix uteri, my first endeavour was chiefly directed to overcome that retarding cause. I found, however, in consequence of the slow and irregular return of the pains, that the dilatation went tardily on, notwithstanding I continued assisting every pain. I had no alternative but to excite and renew uterine action from time to time, whenever it flagged, by gentle but persevering efforts in dilating the cervix. During the time the first stage of labour was about being half completed, and which occupied nearly four hours, another part of my operations was directed to the support of the placental margin, (which was gradually descending), by keeping it above the pubes. I need scarcely add, that I had many painful apprehensions about the issue of the case, before the child's head entered and occupied the superior strait, from the increasing discharge of blood. When the head had descended so far, all hæmorrhage ceased; the first stage of labour was completed in less than an hour, and a safe delivery was soon afterwards accomplished. The child was still-born, as generally happens in such cases.

The only other circumstance worthy of notice occurred in the extraction of the placenta. I cannot describe that circumstance better than by quoting the following extract from Mr. Ingleby's excellent treatise, already referred to.* "There is a very peculiar form of retention of the placenta, alluded to by Dr. Ramsbotham, which has several times occurred under my own observation, but is, I find, by no means well understood. I mean the attachment, by morbid organization, of a circumscribed portion of the placenta, usually the upper surface, whilst another portion, the opposite edge and side, is detached and lies over the os uteri, or perhaps projects in an elongated form into the vagina. This will be regulated in some measure by the site to which the placenta has been attached; particularly when it happens to be affixed to the inferior part of the womb, since, on the delivery of the child, the detached portion falls the more directly into the vagina, and the practitioner, so far from thinking of morbid adhesion, actually considers the whole separation as very nearly, if not wholly accomplished. This state, therefore, is really a source of much deception and embarrassment; for as the lower part of the uterus, and sometimes the vagina, is occupied by a detached portion of the placenta, the practitioner most unceremoniously urges its detrusion by means of the funis, and reduces the patient to a state of imminent peril. In consequence of these efforts the bulk of the placenta is torn away from the part which still remains in firm attachment; the os uteri closes upon it, and, unless its removal can be promptly effected, the patient is necessarily exposed to dangers of the most formidable kind."

Mr. Gibson undertook to manage the removal of the placenta, while I endeavoured, by external compression, to effect a good contraction of the uterus. From the diminution in the size of the uterine tumor, I imagined I had succeeded in this; but Mr. G. mentioned, although he felt the placenta at the upper part of the vagina, it was so firmly retained, he was afraid, if he used much more force than he was exerting in the extraction,

* Vide Treatise on Uterine Hæmorrhage, p. 200.

that a portion might be disrupted. I took his place, and made an effort with the funis to withdraw it. Disappointed in this, I introduced my hand into the uterus, and found a considerable portion of the placental mass adhering to its anterior parietes, about three inches above the cervix; but by far the greater portion was detached, and lying in the way which Mr. Ingleby has described, partly within and partly without, but not retained by the os uteri. I withdrew the whole *en masse*, and administered a large dose of solid opium. We watched the case for two hours, and neither hæmorrhage nor any untoward symptom supervened.

The progress of her recovery was very much retarded by a severe attack, on the third day after delivery, of pneumonia, and subsequently of phlegmasia dolens. From her extreme exhaustion, Mr. G. despaired of her being able to stand the antiphlogistic treatment he found necessary to adopt for the removal of these complaints. Under his management, however, she was restored to her usual state of health in the course of three or four months.

I have been induced to allude to the particular cause of the detention of the placenta, because it is of rare occurrence, and corroborates the remarks which Mr. Ingleby has made on the dangerous rule laid down by Dr. Gooch, in regard to the force which he recommends for the extraction of the placenta, when it is felt in the upper part of the vagina.*

I have had occasion too often to have recourse to manipulation in the removal of those preternatural attachments by which the placenta is sometimes connected by small portions of its mass, and at other times throughout its whole bulk, to the uterine surface, to be possibly mistaken in this case, as to the nature of the adhesion. Uterine coutraction had detached a much larger portion of placenta than had beeu removed before delivery, as the very different appearances on its surface afterwards indicated; but the remaining portion, which I gradually separated with my fingers, was too intimately connected to be withdrawn by any other method than the one I adopted. Had the cause of detention beeu misunderstood, and forcible attempts at extraction been made by pulling the funis, or that portion of the placenta which was without the os uteri, a considerable portion must have been left within the womb, and would probably, in the almost exsanguined condition of our patient, have produced fatal effects.

Dr. Burns observes,† that irregular action of the uterine fibres may be spasmodic; a state in which the circular fibres of the cervix are generally affected. On this condition we can explain the "colic or cramp pains," as they have been expressly termed, with which Mrs. R. was so much distressed before the commencement of labour.

But the chief and particular cause which retarded its progress consisted in the undeveloped band of the cervix uteri. At the same time, while such a primary agency is admitted in the production of the inefficient state of uterine action, it would be improper, while we take into account all the circumstances of the case, to overlook the co-operations of those accessory causes which I have described as arising from superabundance

* Vide Ingleby's Treatise on Uterine Hæmorrhage, p. 202.
† Vide Burns' Principles of Midwifery, 8th edit. p. 419.

of the liquor amnii,* its confinement above the fœtal head in the upper part of the uterus, and the disordered state of the digestive organs.†

It would be, perhaps, refining too much on causes to assign to each its particular share of power in retarding or counteracting labour; but if I might be permitted doing so, I would say in this case, comparing the pains with the resistance made, that the imperfection and insufficiency of the labour originated in the constriction of the cervix uteri and over-distension of the uterine parietes, and its irregularity in the fits of nausea and sickness.

Of the particular cases in which the plug may be advantageously employed it does not become me to speak, having had no experience in its use. I have a general dislike to it in the latter months of pregnancy, on the ground that when hæmorrhage, either from accidental or unavoidable causes, occurs, procrastination becomes, in every sense of the word, "the thief of time," and "deferred hope" in no circumstance is more apt to make the heart sick, not only of the patient, but of the practitioner. Dr. Burns says, ‡ "As long as the os uteri is firm and unyielding—as long as there is no tendency to open, no attempt to establish contraction, it is perfectly safe to trust to the plug, rest, and cold. But I must particularly state to the reader, that the os uteri may dilate without regular pains, and in almost every instance it does, whether there be or be not pains, become dilatable. Did I not know the danger of establishing positive rules, I would say that as long as the os uteri is firm, and has no disposition to open, the patient can be in little risk, if we understand the use of the plug; we may even stuff the os uteri itself, which will excite contraction." "But if the patient be neglected, then, I grant, that long before a tendency to labour or contraction be induced she may perish." "It is evident when the uterus has a disposition to contract, and the os uteri to open, delivery must be much safer and easier than when it is still inert, and the os uteri hard." He adds, "In some instances we shall find that by the plug alone we may secure the patient. In these circumstances, who would propose to turn the child and deliver it? Who would not prefer the operation of nature to that of the accoucheur? To determine in any individual case whether this shall take place, or whether delivery must be resorted to, will require deliberation on the part of the practitioner. If he have used the plug early and effectually, and the pains have become brisk, he has good reason to expect natural expulsion, and the labour must be conducted on the general principles of midwifery. But if the uterus have been enfeebled by loss of blood—if the pains be indefinite—if they have done little more than just open the os uteri, and have no disposition to increase—then he is not justified in expecting that expulsion shall be naturally and safely accomplished, and he ought to deliver. When he dilates the os uteri, he excites the uterine action, and feels the membranes become tense. But he must not trust to this; he must finish what he has begun."

* Dr. Denman has an excellent section on the too great distension of the uterus. Vide Introduction, &c. 7th Edit. p. 223.

† In Burns' Principles, p. 418, an attempt is made to account for this, "by changes in the action or condition of the origin of the nerves supplying the uterus."

‡ Vide Burns' Principles, p. 326.

Mr. Gibson, when he was first called, in order to restrain the hæmorrhage until such changes had taken place as might render delivery easy, stuffed the vigina and os uteri. It might be said, that in consequence of the continuance of the draining the operation had not been efficiently performed, and that therefore no valid objection can be urged on this ground against the utility of the plug. But though the external hæmorrhage had been arrested by the plug, there was reason to apprehend, from the dark appearance of the clots which were discharged, that uterine distension, from internal accumulation of blood, might have taken place to an alarming extent. According to Dr. Merriman, the advantages of the plug are limited, and can only answer when the uterus is not very distensible.* "It can never be relied upon after the uterus has acquired much bulk, or is capable of being largely dilated; for, however completely the vagina may be closed, as no pressure can be made upon the open vessels within the uterus, these might continue to pour out blood into the uterine cavity, sufficient to destroy the patient's life, though not a drop of discharge was visible without the vagina."

"The arteries of the uterus cannot be closed except by a due contraction of that viscus. Whenever the uterus is in a distended state, the arteries will continue pouring out blood, and the greater the accumulation of coagula within it, so much the greater will be the amount of hæmorrhage. The presence of the plug, then, so far from benefiting the patient, by preventing the escape of the coagula, adds to her peril. The plug, therefore, as it seems to me, is inapplicable in all cases where the bulk of the uterus exceeds that of a pregnancy of three or four months, or when the parietes are so easy of distension as to yield readily to the accumulation within it. Even in the case of unavoidable hæmorrhage, I have known a large quantity of coagula collected in the cavity of the uterus—much greater than could have been suspected, and adding greatly to the peril of the case." †

Although it may be conceded that the proper practice lay in rupturing the membranes for the purpose of effecting a diminution of the volume of the uterus, by the removal of the liquor amnii, and that in the circumstances of the case it was found necessary to excite and establish and keep up uterine action by manual assistance, the question remains still to be answered, how far assistance in that way can be persevered in, without injury to the patient, and with advantage to the labour. My general objection to the use of the plug, I have said, arises from this, that by trusting to it, we are apt to substitute an uncertain for a more decided line of practice, and by delay may lose an opportunity, which may never return, of adopting a safer mode of management by means of turning, when possible, or by stimulating uterine action, by the dilatation of the os uteri. The patient should seldom or never be left until delivery be accomplished, when hæmorrhage occurs, whether the placenta be implanted over the os, or attached near the cervix uteri. The patient's life must always be in

* Vide Merriman on Difficult Parturition, 4th edition, p. 133.

† Dr. Hamilton, in his Practical Observations, part ii. p. 234, records two cases in which retention and accumulation of blood within the uterus took place before delivery, consequent to a partial separation of the placenta. There was no discharge from the uterus, and no symptom of labour in one of the cases, which proved fatal.

danger from returns of the flooding, until the uterus be completely emptied of its contents; and all I maintain is, that by manually assisting the dilatation of the os uteri we can always save hours of labour, and very often fatal effusions of blood. I have long practised this plan, and my experience confirms all that Dr. Hamilton has written on its advantages and perfect safety. I have never known inflammation or even simple irritation of the os or cervix uteri to occur in any case where I have operated. While I believe that these parts are not easily injured * by the finger, although long-continued and active assistance be afforded in their dilatation; at the same time all sudden and violent force used for that purpose must be strongly deprecated. I am convinced, that the congested and apparently sphacelated condition, in which the os and cervix uteri have been found after death, may have occasioned much misapprehension on this subject. These appearances, however, are frequently *post-mortem* changes, and I have observed them as often after easy, as after severe labours.

The dangerous consequences of procrastination—of trusting to accessory means of treatment, when active remedial measures are in our power—are best illustrated by cases. The narration of cases 139, 140, 141, 144, 147, 149, 151, &c. &c., in Dr. Ramsbotham's Practical Observations, part ii., p. 832, puts in a stronger light the fatal effects of constant slight "drainings" without interference, than any language I can employ.

In all these cases, the dangerous symptom is the continued loss of blood. I cannot, however, agree with Dr. Ramsbotham, when he says, "When this alarming symptom subsides, there can be no necessity for interference." Dr. Hamilton's remarks † on this point are too valuable to be omitted. "His conviction is, that the means employed to complete the delivery rouse the living powers, and he can solemnly affirm, that the chief error he has witnessed in the treatment of these cases has been *procrastination*. That on some occasions of uterine hæmorrhage during the latter months of pregnancy, no human means can save life, is a melancholy truth; but that, in a very great majority of fatal cases, the *indecision* of the practitioner is the *chief cause of the mischief*, he verily believes; and when this subject is seriously considered, a conscientious practitioner would naturally ask himself, what harm can ensue *from active interference*, before *decided* symptoms of *immediate danger* manifest themselves?

"Hitherto, the bugbear which seems to have haunted the minds of practitioners in the treatment of those cases, is the *supposed difficulty* or *danger* of *dilating* the *os uteri*. But if it be practicable, when the membranes are entire, to hook down a lower extremity of the infant, without

* I am supported in this opinion—1st, by the cases in which the os and cervix uteri are subjected to long-continued compression, without injury from the child's head, in contracted pelvis; and 2ndly, from the successful result of the operations performed in the divisions of those parts. In the 3rd vol. of the Edin. Med. Essays, a case is recorded where Dr. Simpson "cut through a callosity of an os uteri half an inch thick." In the Brit. and For. Med. Review for July 1838, is related a case of Dr. Burdach's, of cartilaginous os uteri, requiring an incision of one and a half inch, with perfect recovery; and also one of Dr. Gruhn's, of prolapsus uteri, in which an incision three inches long was made in the os uteri, and the woman recovered.

† Vide Practical Observations, part ii. pp. 268 and 269.

carrying the hand through the os uteri, which the author most positively affirms he has done innumerable times—and if, when a lower extremity is drawn through the uterus, the cervix, and os uteri dilate readily and safely (being duly supported), which, according to his experience, invariably happens, all objections founded upon the difficulty or danger of turning must be held to be futile."

To leave the completion of labour to the full effect of the natural agents, embraces a rule far too general, to be in my opinion a justifiable one in practice. It cannot be acted upon in country practice, where the practitioner is often called to patients at great distances from home, and whom it is impossible regularly to attend. The progress of such cases can neither be narrowly watched, nor, in the event of any return of hæmorrhage, can assistance be readily procured. The styptic treatment recommended by Dr. Dewees cannot safely be followed in such circumstances. When summoned in such a case, though the discharge may have abated before my arrival, provided it has not sunk the living powers, I always propose immediate delivery—that is, I never leave the patient to the mercy of palliative means, nor make any endeavour to enable her to go on to the full period of gestation, but consider the period has arrived when the connexion between the mother and the fœtus, which has been partially, should be wholly dissolved. Many may suppose I am advocating a rash incautious practice, both in reference to the means employed, and their period of application. With regard to the first, I have always found the finger a safe and efficient dilator of the os and cervix uteri; and with regard to the latter, I consider that *when a patient's life has once been in jeopardy from hæmorrhage*, it is the practitioner's blame if she be in *danger from its return*, as the means, which are always in his power to prevent it, should at once be put in practice. I have long adopted such a practice, and have found it to succeed; and I recommend it, because it has never failed.

I urge this advice with the more earnest confidence, that it does not originate in matter of opinion, but has been founded on and confirmed by long experience. Dr. Osborn* lays it down as an invariable rule in practice, as affording the only chance of saving the patient's life, "that recourse be had to artificial delivery immediately upon the first attack (of hæmorrhage), and long before danger is apparently incurred; for if we wait till symptoms of danger arrive, the event will prove that, in general, we shall have already waited too long." The most besetting sin, and certainly one of the worst evils in operative midwifery, is indecision; for, next to forming an accurate opinion, is acting decidedly and promptly upon it.

My experience extends only to four cases of hæmorrhage from low attachment of the placenta, which, in two of them, was implanted over the os uteri. They all terminated favourably. Two of the children were born alive. Three of the cases occurred in women, who had had large families, and one in a first labour. I experienced little or no difficulty in dilating the os uteri in the former cases, the operation of turning and delivering being performed within ten minutes. In the latter case the os and cervix uteri were not nearly so dilatable, and a much longer peri-

† Vide Dr. Osborn's Essays on the Practice of Midwifery, p. 49. 1795.

od of time was required. In one of the cases I was benefited by the assistance of Dr. Beilby, Edinburgh. The symptoms in the other cases were, in my opinion, so urgent, as to warrant me to proceed immediately to delivery in turning, without waiting for a consultation. I have no doubt, had delivery been postponed until that had been procured, that the result in the majority of the cases would have been fatal. I may be permitted, therefore, to repeat Dr. Osborn's precept, that, "we cannot in such cases be too quick in the determination of the measures to be pursued, or too prompt in the execution of them." Caution and deliberation there are worth nothing; celerity and expedition are every thing.

In cases of twins, and especially when there were two placentas, I have saved in more than one case the woman's life, by having speedy recourse to turning when hæmorrhage occurred after the delivery of the first child, and where external compression by the hand had failed to excite uterine action. As far as my experience goes, the irritation of the hand introduced into the vagina, very generally, and within the cavity of the uterus, almost always, renews the dormant and suspended action of that organ in such cases.

In several cases of accidental hæmorrhage from partial separation of the placenta during the last three months of gestation, I have had occasion to accomplish delivery by turning, and I have never known any injury done to the os or cervix uteri when the hand has been used as a dilator, although considerable time and force have been used for that purpose. But here the precept must be reversed in the execution of the means that I recommended in their adoption; the parts must be slowly and by intervals dilated, and all attempts at turning and extraction must be gradually and deliberately made. Here caution and deliberation are every thing; celerity and rashness the reverse.

"If the os uteri is so much contracted," old Smellie remarks,* "that the finger cannot be introduced, some authors have recommended a dilator, by which it may be gradually opened, so as to introduce a finger or two. Doubtless some cases may happen in which this may be necessary, though in all those to which I have been called, when there was a necessity for forcing delivery, the mouth of the womb was open enough to receive the tip of my finger, so that by gradual efforts I could effect a sufficient dilatation; and it is certainly a safer method to dilate with the fingers and hand than with an instrument."

The instrument Smellie refers to, I presume, is the dilator invented by Roonhuysen, an engraving of which, and a description of it by Rathlaw, is given by Dr. Spence.† This instrument was long known under the name of "the Roonhuysian secret;" and it had been well for the inventor's character that he had kept the secret inviolable to all but himself. I have only mentioned it, as affording, among many other instances, an example of one of the most absurd and impracticable devices to which the older obstetricians had recourse, when their ingenuity was excited by a "zeal not according to knowledge."

I need scarcely add, in cases of hæmorrhage during the last three

* Vide a Treatise on the Theory and Practice of Midwifery, by W. Smellie, M.D.; page 332. 1752.

†, Vide System of Midwifery, by David Spence, M.D.; pages 575 and 578. 1784.

months of gestation, it is of the greatest practical importance to determine whether the discharge proceeds from the large blood-vessels supplying the placenta, or the small vessels supplying the decidua, or those which may be slightly connected with the membranes.

If this communication had not already exceeded the ordinary limits, I could give, in further proof of the danger of non-interference in attacks of flooding, the particulars of the histories of six cases terminating fatally, which have occurred within the last twenty years in this neighbourhood. I did not see any of these cases during life, and my assistants were only called in to some of them at the last hour. They appeared to me to be all mismanaged, in consequence of gestation being either allowed to go on to a late period, when the natural powers sunk, or of the want of timely assistance, *partu durante*. One woman died undelivered: three of them survived delivery only half an hour; and the other two remained in a state of scarcely perceptible animation for two days. The occasional occurrence of such melancholy instances has indelibly impressed on my mind the imperative necessity of active treatment.

In town practice the powers of the patient's constitution can be well tested by delay, and the practitioner may learn the extent to which she can bear the loss of blood, without the chance of much loss of reputation, for he can divide the responsibility of the case with the medical friends he consults, and may make up for the want of activity of treatment by overwatchful anxiety and regular calls. In country practice, however, the practitioner would hazard too much of his own character in putting his patient's strength to so severe trials. There, all his acts are more rigorously examined, and judgment is more summarily pronounced. By a single failure, his professional confidence might be destroyed. If a woman were to die undelivered, or in his absence, from hæmorrhage, a life-rent of public unforgiveness would be entailed upon his name; and he is therefore compelled, by his peculiar position, to trust more to the devices of art, and to leave less to the resources of nature. "*Suis hæc viribus, sola, sine medica, plerorumque tuetur sanitatem, morbis medetur. Hac deficiente, aut repugnante, irrita artis molimina.*"

Dr. Hamilton employs this illustration of the impropriety of leaving hæmorrhage to be arrested by the coagulation of blood in the extremities of the ruptured uterine vessels, and of promoting a tendency to such coagulation, by the direct and local application, as well as by the internal use of styptics. He asks* "whether, if any of the audience should wound his finger in mending a pen, he would direct a vein to be opened, and then swallow a dose of sulphuric acid, or of the acetate of lead; or whether he would bind up his wounded finger?"

Although an illustration be no argument, I would draw another illustration from an accident not uncommon among carpenters, in the division of the anterior tibial artery by their hatchet. Before the patient is visited he has fallen into a state of syncope, from the great loss of blood—at all events the hæmorrhage has stopped, and the attendants have plugged the wound with cotton, and covered it up with dressings wet with some styptic wash. The medical attendant, although he may not be credulous enough to believe, that the wounded artery will not discharge more blood,

* Vide Practical Illustrations, part ii. p. 218.

yet acts, as if he really entertained that opinion. He leaves the patient to contraction and coagula. Soon afterwards there is another return of hæmorrhage, which also stops before he answers the second summons; and still he does nothing to secure the injured blood-vessel. In this way successive attacks of discharges of blood come on and go off; and although no doubt can exist as to the source of the hæmorrhage, whether he regards the instrument which inflicted the wound, the colour of the blood, or the manner in which that fluid flows, still nothing is done until the patient's strength is exhausted, either by the extent and number of the discharges, or by the unmanageable nature of the last effusion, which, in spite of bandage and compress, will not stop, but threatens to destroy the unhappy sufferer. *Then that is done at last which should have been done at first;* the wound is dilated, ligatures are put round the extremities of the bleeding vessel, and there are no more returns of blood.

So is it with a dangerous attack of uterine hæmorrhage. The divided artery is the partially detached placenta; the cotton stuffed into the wound the obstetrical plug; and the opodeldoc the styptic injection. The passive treatment in both cases is attended with parallel results. There is the same blind reliance on the uncertain operations of nature—a similar culpable non-interference, in spite of the frequent forewarnings of danger, until the patient be reduced to a state nearly, if not entirely, irremediable.

Penicuik, *August* 7, 1838.